1:Heckewelder M-5 (ca. 1800)1819
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60 to be laid up for weeks and months at a time on this account, and I have seen boys 10 and 12 years of age, who through colds or fits of sickness had become so contracted that they never afterwards recovered the use of their limbs. 164

Worms are a very common disorder among Indian children, and great numbers of them die from that cause. They eat a great deal of green corn when in the milk, with beans, squashes, melons and the like; their bellies become remarkably large, and it is probably in that manner that the worms are generated. I rather think that Indian children suffer less in teething than the whites.

The gout, gravel, and scrophula or king's evil, are not known among the Indians. Nor have I ever known any one that had the disorder called the *Rickets*. Consumptions are very frequent among them since they have become fond of spirituous liquors, and their young men in great numbers fall victims to that complaint. A person who resides among them may easily observe the frightful decrease of their numbers from one period of ten years to another. Our vices have destroyed them more than our swords.

CHAPTER XXIX.

REMEDIES.

THE *Materia Medica* of the Indians consists of various roots and plants known to themselves, the properties of which they are not fond of disclosing to strangers. They make considerable use of the barks of trees, such 757 278

l:Heckewelder M-5 (ca. 1800)1819
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as the white and black oak, the white walnut, of which they make pills, the cherry, dogwood, maple, birch, and several others. They prepare and compound these medicines in different ways, which they keep a profound secret. Those preparations are frequently mixed with superstitious practices, calculated to guard against the powers of witchcraft, in which, unfortunately they have a strong fixed belief. Indeed, they are too apt to attribute the most natural deaths to the arts and incantations of sorcerers, and their medicine is, in most cases, as much directed against those as against the disease itself. There are, however, practitioners among them who are free from these prejudices, or at least do not introduce them into their practice of the medical art. Still there is a superstitious notion, in which all their physicians participate, which is, that when an emetic is to be administered, the water in which the potion is mixed must be drawn up a stream, and if for a cathartic downwards. This is, at least, innocent, and not more whimsical perhaps, nor more calculated to excite a smile, than some theories of grave and learned men in civilised countries.

In fevers the Indians usually administer emetics which are made up and compounded in various ways. I saw an emetic once given to a man who had poisoned himself with the root of the May Apple.* It consisted of a piece of racoon skin burned with the hair on and finely powdered, pounded dry beans and gunpowder. These three ingredients were mixed with water and poured down the patient's throat. This brought on a severe vomiting, the poisonous root was entirely discharged and the man cured.

In other complaints, particularly in those which proceed from rheumatic affections, bleeding and sweating are always the first remedies applied. The sweat oven is the first thing that an Indian has recourse to when he

* Podophyllum peltatum.

1:Heckewelder M-5 (ca. 1800)1819
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(Acquaintance took
Between the years 1771 and 1780, four Indians of my)
762 the root of the may-apple, which is commonly used on
[278] such occasions, in order to poison themselves, in which they all succeeded, except one. Two of them were young men, who had been disappointed in love, the girls on whom they had fixed their choice, and to whom they were engaged, having changed their minds and married other lovers. They both put an end to their existence. The two others were married men. Their stories, as pictures of Indian manners, will not, perhaps, be thought uninteresting.

One of those unfortunate men was a person of an excellent character, respected and esteemed by all who knew him. He had a wife whom he was very fond of and two children, and they lived very happily together at the distance of about half a mile from the place where I resided. He often came to visit me, and as he was of a most amiable disposition, I was pleased with his visits, and always gave him a hearty welcome. When I thought he was too long without coming, I went myself to the delightful spot which he had judiciously selected for his dwelling. Here I always found the family cheerful, sociable and happy, until some time before the fatal catastrophe happened, when I observed that my friend's countenance bore the marks of deep melancholy, of which I afterwards learned the cause. His wife had received the visits of another man; he foresaw that he would soon be obliged to separate from her, and he shuddered when he thought that he must also part from his two lovely children; for it is the
[586] custom of the Indians, that when a divorce takes place between husband and wife, the children remain with their mother, until they are of a proper age to choose for themselves. One hope, however, still remained. The sugar-making season was at hand, and they were shortly to remove to their sugar camp, where he flattered himself his wife would not be followed by the disturber of his peace, whose residence was about ten miles from thence. But this hope was of short duration. They had hardly been

2:Newcomb E-4, 5 (1951-1952) 1956
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224 Such old men, accompanying a hunting party, get both meat and skins, for the good hunters will not let them return empty-handed. They have, in general, and the Unami in particular, the custom that when a huntsman has shot a deer, and another Indian joins him or only looks on at a distance, he immediately gives him the whole animal and goes in pursuit of another.[39]

[411] The blowgun was in use among the Munsi by 1824, but was apparently present earlier; it was never of any great economic importance.[41] "Calls" were made to attract deer and turkeys. The deer call or "bleat" was made of cedar and was used primarily during the spring and early summer before the fawns had been weaned.[42] Harrington mentioned that "the deadfall and the 'twitchup' snare seem to have been the most popular varieties of traps."[43] The Delawares were also reported to be ex-
[481] cellent stalkers of game and pursued wounded animals until their prey dropped from exhaustion.[44] If a hunter could not at first get within range of a deer he would chase it until he could, this procedure perhaps consuming an entire day.[45] One eighteenth-century author mentioned that deer were hunted by torchlight at night.[46]

226 Fishing.—Van der Donck said that Delawaran peoples "use all kinds
[252 of fish, which they commonly cook without removing the entrails, and
262] snakes, frogs and the like."[47] Specifically, they caught and ate rock fish, shad, yellow perch, trout, eels, catfish, sunfish, sturgeon, and un-
[225] doubtedly others, from both fresh and salt water. In 1756 two harbor seals were shot and eaten, but this was an unusual incident.[48] Tortoises were caught, and shellfish in large quantities must have been taken, if Skinner was correct in attributing shell mounds of the area to the Delawares.[49] Juet stated that the natives brought out quantities of oysters to trade to the crew of Hudson's Half Moon.[50]

Methods of fishing varied somewhat; Lindestrom described a method in which a stream was dammed when the water was high, so that fish were stranded behind the dam when the water was low. The fish were caught with bare hands or shot with the bow and arrow.[51] De Rasieres
[283] said that the Indians around Manhattan caught fish with "a drag-net they themselves knit very neatly, of the wild hemp, from which the women and men spin the thread."[52] Brinton mentioned fishhooks of bone and dried claws of birds, and Pastorius reported the use of hooks.[53] Harrington mentioned several methods of fishing. These may not be ab-
[278] original since they do not appear elsewhere. He stated that fish were stupefied by large quantities of crushed green walnuts thrown into ponds. He also noted spearing and shooting of fish at night by torchlight.[54] Fish

[39] Zeisberger, 1910, p. 91.
[41] Harrington, 1913, p. 221; Kinietz, 1946, p. 63; Ketchum, 1865, II: 190 (1790).
[42] Foreman, 1937, p. 107; J. T., F. W.
[43] Harrington, 1913, p. 222.
[44] Zeisberger, 1910, p. 23.
[45] *Ibid.*, p. 23.
[46] Brickell, 1842, p. 47.
[47] Van der Donck, 1909, p. 363.
[48] Holm, 1834, p. 48; De Rasieres, 1909, p. 105; Zeisberger, 1910, p. 37.
[49] Holm, 1834, p. 48; Denton, 1845, p. 7; Skinner, 1909, pp. 5-17, 45-48; J. T.
[50] Juet, 1909, p. 30.
[51] Lindestrom, 1925, p. 219; Berlin, 1887, pp. 167-69.
[52] De Rasieres, 1909, p. 105.
[53] Brinton, 1885, p. 82; Pastorius, 1912, p. 434.
[54] Harrington, 1913, p. 222.

2:Newcomb E-4, 5 (1951-1952) 1956
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Curing

Although most serious ailments were treated magically by shamans, there was a considerable body of knowledge concerning various herbs, roots, and decoctions of one sort or another that did have a beneficial medicinal value. It should also be noted that wounds and external injuries were successfully treated.[85] This practical medicinal knowledge was the property of both ordinary individuals and shamans. Many of the curative practices, both magical and otherwise, were directed at the spirits, rather than derived from a real knowledge of physiology and pathology. This, of course, did not decrease the beneficial (or harmful) effects of the various remedies.[86]

Roots, herbs, and bark, particularly oak, walnut, cherry, dogwood, maple, and birch, were used as medicines.[87] These materials were prepared and compounded in a number of ways, and the knowledge of them was a closely guarded secret, passed on to one's children only when the owner was at death's door.[88] This secrecy remains, and my informants refused to do more than hint at the nature of their medicines. Emetics, blood letting, and perhaps cupping were common remedies in the eighteenth century.[89] The most common medicinal practice was sweat bathing. Men used the village sweat bath more frequently than did the women, who had their own.[90] A sweat bath was taken by an individual when he was tired or had contracted a cold or did not feel well. Men usually took one or two a week; women took them less frequently. Occasionally, a shaman would take a sweat bath while his patient lay outside, and frequently various medicines were taken during or immediately after a sweat bath.[91]

Folklore

Knowledge of Delaware folklore is imperfect and incomplete. The purely secular tales are little known; however, I obtained a few in the field. The mythology dealing with supernatural beings is only slightly better known. R. C. Adams published a number of tales current in the late nineteenth century; none of the stories he related was told to me.[92] The earliest origin story was obtained by Dankers in the seventeenth century, who had directed some questions at an old man of the Hackinsack division of the Unami:

[85] Van der Donck, 1909, p. 301; Thomas, 1912, p. 340; Zeisberger, 1910, p. 15. Tantaquidgeon, 1942, described medical practices and materia medica of the Delawares. Mahr, 1951, has summarized the early data on Delaware herbalism and healing; Mahr, 1955, has studied nonesoteric herb lore.

[86] Heckewelder, 1881, p. 224.

[87] Penn, 1882, p. 244; Zeisberger, 1910, p. 25; Heckewelder, 1881, p. 224; Lochenbach, 1938, p. 376; Tantaquidgeon, 1942, pp. 24-37.

[88] Zeisberger, 1910, p. 24; N.D.

[89] Zeisberger, 1910, p. 26; Heckewelder, 1881, p. 225.

[90] De Vries, 1909, pp. 217-18; Zeisberger, 1910, p. 25; Heckewelder, 1881, p. 226.

[91] Zeisberger, 1910, p. 26; Heckewelder, 1881, p. 225; O.A.

[92] Adams, 1905.

3:Zeisberger M-5 (1767-1780)1910
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[37] These grow on very stony ground near the water, where the sunshine is particularly hot. In these parts I have not come across this variety.

Besides, there are mulberries,[95] plums,[96] and wild grapes of three sorts, those growing on high ground[97] or hills being the best; those[98] found in the bottoms are very sour. Crabapples[99] grow in great plenty and the Indians, being very fond of sharp and sour fruit, eat them in abundance.

Of nuts there are found: (1) The well known hazel nut,[100] (2) the hickory nut,[101] found in great plenty in some years and which the Indians gather in large quantities and use not only as they find them — they have a very sweet taste — but also extract from them a milky juice used in different foods and very nourishing. Sometimes they extract an oil by first roasting the nut in the shell under hot ashes and pounding them to a fine mash, which they boil in water. The oil swimming on the surface is skimmed off and preserved for cooking and other purposes. (3) The walnut of two varieties, the white walnut[102] deriving its name from the color of the wood which, strictly speaking, is gray, and the black walnut,[103] of which the wood is dark-brown, sometimes even shading into violet. The latter is very much used by cabinet makers for tables, chests and other things. The nuts, the one variety having a very hard shell, are eaten, but are very oily.

The papa[104] tree, which I have seen nowhere else than along the Ohio, bears a very beautiful fruit, in form and size resembling a middle sized cucumber, of an agreeable smell and taste.

Wild laurel[105] is found in the bottoms in great abundance; the berries are smaller than those found elsewhere, but have about the same taste. Of these, even the whites make use. They grow on bushes, the wood of which has a strong spicy color and taste, used by the Indians for medicine and called by the English, spicewood.[106]

Chestnuts[107] are very plentiful in some years. The Indians gather them and prepare various dishes with them. A larger variety of chestnuts[108] is native to these parts, but these are not fit to eat.

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137 [278] The bark of stone birch[123] trees, as of many others, the Indians pound fine, mix with water and use as a medicine. This is the only variety of birch trees here. In Pensilvanien there are birch trees like those of Europe, though they do not grow to any size.

Aspen trees[124] are also found, though not in great numbers nor everywhere. One kind of tree is found here that I have seen nowhere else. The wood is soft and yellowish. The leaves are smooth and oval-shaped. The Indians call it *Wiswemiuschi*, the yellow tree.[125]

317 Of oil wells I have seen three kinds, (1) wells that have an outlet; (2) wells that have no outlet, but are stagnant pools; (3) wells in creeks and even in the Ohio at two different points, one hundred and fifty miles from one another.

In the wells which have an outlet, oil and water together exude from the earth and where these flow grass and soil become oily. When there is no means of discharge one sees nothing more than oil welling up, which, if none has been taken off for some time, floats an inch or more in depth on the water. In the creeks it is possible to see some of the places where the oil flows, others not, for often the current carries the oil with it at such rate that you see the oil over all the surface of the water. In the Ohio there are, also, such places in the region of the oil wells. Here the current is very gentle and the Indians skim off the oil, though it is not easy to do this as the current, even though not swift, keeps carrying it along. Such places are usually revealed by the strong odor. Even though the water of a river keeps carrying away the oil, one may smell it at a distance of a quarter of a mile from the well. The soil near an oil well is poor, either a cold, clayey ground, or if it is near a creek, a poor quality of sand at the top. Neither good grass or wood will grow nearby, hardly anything more than a few stunted oak trees.

If the Indians wish to collect oil, which they prefer to do where the well has no discharge, as it is there most easily secured, they first throw away the old oil floating on top, as it has a stronger odor than that which wells up fresh from the earth.[126]

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The odor is somewhat like that of tar, though not very much so. They stir the water violently then let it settle and become clear. The more the pool is stirred the more abundantly does the oil flow. When it is clear they scoop it into kettles, and, as it is impossible to avoid getting some water, boil it and preserve it for use. They use it as a medicine in all sorts of cases for external application, thus for tooth-ache, head-ache, swelling, rheumatism, strained joints. Some also take it internally and it appears to have hurt no one in this way. Some, indeed, declare that the oil flows from the coal deposits, but this is not likely, for in the first place, there is no sign of pit coal to be seen in this region — one sees nothing more than poor sandstone and, in the second place, in other parts where there is much pit coal, as for example, along the Muskingum, no sign of oil is to be seen. Were the oil to be found there, the Indians would know of it, for they value it highly and have looked for it, but found none. Most probably it comes out of the earth. It is brownish in color and may be used in lamps, for it burns well.

Salt springs are to be found both along the Muskingum and along the Ohio. Of this salt the Indians make little use; they prefer to buy it from the whites, even though they have to pay a high price for it owing to the fact that it has to be brought a considerable distance from the seaports. Moreover, they use very little salt and seem not to require it. They often eat their food unsalted, even though they may have the salt, until they feel a longing for it.

These salt springs are usually to be found on the bank of a creek or even in the middle of the creek on a sand-bank, the fresh water flowing on both sides. The Indians have on occasion boiled a considerable quantity of salt in a short time at such a well, so that it would appear worth the labor to get it, especially as it is so expensive.

There are, also, many salt licks to which cattle, horses and game go in large numbers. These are generally springs that have salt or saltpetre[137] in them.

The common sort of stones in this region along the Ohio are the sandstones. Some are very hard, others soft. They

[137] [i.e., crude oil.—Arelst]

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one present draws a few whiffs of smoke and this is called smoking the peace-pipe. 276

There are four kinds of clay. There is the white, which is almost like chalk and with which, when dry, one can write as with chalk.[140] Another variety is quite black. This, however, becomes quite white when burned. Besides these, gray and yellow clays are found. A sort of yellow earth, rather of an orange tinge is found, of which the Indians, especially the warriors, make a fine color by burning.[141] With this they paint themselves and they are particularly careful that the head shall be always red. It is not too much for the Wiondats to come here to Tuscarawj, a distance of at least a hundred miles, to supply themselves with this red coloring matter. 135 [386] [301]

Concerning plants and roots of medicinal virtue, it would be possible, if one were to devote himself to inquiry, to secure a great deal of information from the Indians, for what one of these does not know another does, each man and woman having some knowledge in this direction, some more, some less. Hence, the custom that a patient who has consulted an Indian and secured a medicine from him without, however, being benefited, will go immediately to another; if no relief is obtained through his advice, the patient goes to a third, a fourth until he finds one whose medicine helps. For many ailments they have very good remedies, e. g., for rheumatism. In respect to this affliction I have witnessed instances where they have effected a thorough cure and not only once or twice. At times they can secure desired results with only two or three kinds of roots, at other times more are required. If a simple remedy does not afford relief, they may use twenty or more kinds of roots. Even in such cases I know of cures having been effected. In treating rheumatism, bathing and sweating play a great part. 757 278

They have remedies even for fevers. When a patient has been given a dose, they are generally able to tell from its workings whether he will recover or die. If he does not retain the medicine, this is regarded as a sign that he will hardly recover. I have paid some attention to this and like cases of treatment and found that the Indians have generally been correct in their

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predictions. In one important respect, according to my opinion, they make mistakes, namely, in not properly measuring doses and often needlessly torturing patients. Hence, it is that in connection with the external hurts, where over-treatment is less likely to occur, they have the better results, as is the case with rheumatism, for which they use only external applications. One Indian knows of good remedies for one disease or kind of injury, another another. Owing to the fact that they rarely reveal their knowledge to each other, much of the practical knowledge is lost.

In the matter of diseases peculiar to women, the women know a number of remedies, which usually act quickly and well, as in the case of hard labor, which sometimes occurs, though not frequently, and in other troubles. If mothers cannot suckle children for want of milk, they are able, by use of a drink, to increase the supply.[143]

In the use of poisonous roots the Indians are well versed, and there are many melancholy examples where they have by their use destroyed themselves or others. If a case of poisoning is taken in time, the effect of the poisonous root may be prevented by inducing vomiting. In case assistance is rendered too late, death follows, as a rule, in a few hours. There are poisonous roots that operate by slow degrees, in some cases illness may last a year or longer.

The so-called Poison Vine[143] grows plentifully in the bottoms. It climbs up the trees, much as a grape vine will, the main stem becoming as thick as an arm. Some are affected with swelling in the face and body if they touch it, others, even when the wind blows over it upon them. This is very painful until cured. Others do not suffer from the vine at all. This holds good of Indians as of others.

There are some poisonous trees.[144] These do not attain great height. They have a milky juice under the bark which is very poisonous.

The bark of many different kinds of trees is used by the Indians for preparing medicine. Occasionally, you will meet an Indian who has knowledge in this kind of remedies, but knows nothing of roots or herbs. With the white walnut bark,[145]

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With the white walnut bark, 115

used externally and internally, they effect many cures. Laid upon flesh wounds this relieves pain at once, prevents swelling and accelerates healing. Applied externally in case of tooth-ache, head-ache or pain in the limbs, this brings speedy relief.

Beyond question there are many roots and herbs not found in Europe; perhaps it would be safe to say that this is true of most here found, but as I am no authority in this subject and know no names, except perhaps the Indian designations, I will add nothing further about roots and herbs. Doubtless, there are books from which one might get more information than it is in my power to give.

The following quadrupeds are to be found along the Ohio: In the first place, there are the deer,[116] whose skins are much used in barter and trade by the Indians. Their horns are not straight, but bent toward each other and have prongs. From May until September they are red, after that they lose the red hair and their hide is covered with long, gray hair, which is their winter coat. At about the beginning of the year they shed their horns; new ones grow in spring. These are at first and until they attain their full size, covered with a thin skin, which peels off when the horns harden. The tail is about a foot long and stands up straight when they run. As the under side of the tail is white it is possible to see them running at a great distance. The young are born in June or about that time, are red, spotted with white, until in the fall when they become gray. Deer have young each spring, sometimes two. As, however, they are hunted so persistently at the call of trade, their numbers diminish with each year, even though the forests are of vast extent, for the hunters are many. A large buckskin is valued at a Spanish dollar; two doeskins are regarded as equal in value to one buckskin.[117]

The bear is quite black, has short ears, a thick head and quite a sharp snout.[118] It has but a very short tail and great strong claws on his feet. It can easily climb the trees and bring down chestnuts and acorns. This is done, however, only when these are not ripe and do not, therefore, fall down. They generally break off the branches, throw them down and then climb

759 but occasionally a man is blessed with a vision [8] in which the Creator bestows upon him this great gift, and like Wi·tapanóxwe, he becomes an herbalist. In addition to the knowledge of healing acquired through his guardian Spirit,[9] the informant has also followed carefully the teachings of his mother who was recognized by Delaware of the older generation as one adept in the art of compounding and administering herbal remedies.

[791] The second class is composed of individuals whose supernatural power enables them to perform acts such as reuniting an estranged couple or dispelling a supposedly evil charm. Certain rare plants are employed by them in practices resorted to only in emergencies.

It must be emphasized here that, according to Delaware belief, the practitioners are the medium through whom the Creator sends his healing power to alleviate distress caused by the physical and mental ills which attack the frail bodies of mankind.

Absolute faith in the unfailing power and benevolence of the Creator is the force which inspires the Delaware who has been blessed with a medicine vision and he is ever appealing in prayer to that higher Spiritual Force for aid in his professional undertakings.

[824 825] Believing that plants and animals in general are closely related to mankind [10] and that the Creator has endowed them individually with spiritual natures equally as sensitive as our own, the Delaware herbalist is always careful to perform the formal propitiatory rites before gathering a plant or removing part of an animal for use in making medicine.

759 824 782 ●278 If a practitioner is called upon to treat a person during the growing season in spring or summer, his first move, after the formal acceptance of the case and receipt of a gift of tobacco, is to go out and seek a plant of the desired species to be used in making medicine for the treatment of the particular ailment. After coming upon the first plant

[8] Zeisberger *(op. cit.* p. 25) "Fancied skill and imagined ability to heal the sick are traced to dreams which these individuals may have had in their youth. To the dreams they appeal, for in them they have much faith." See also Speck, 1931, p. 51; Harrington, 1921, p. 61; and Benedict, 1923.

[9] Harrington (1921, p. 80) quoting from the notes of R. C. Adams, "It is believed by the Delaware that every one has a guardian spirit which comes in the form of some bird, animal, or other thing, at times in dreams and tells them what to do and what will happen. The guardian spirit is sent from the Great spirit."

[10] Speck (1931, pp. 28, 29) discusses the principle of consanguinity as applied to deities and nature-forces.

of the variety required, he does not gather it [11] but performs a ritual to appease the Spirit of the plant. A small hole is dug towards the east near its base and a small quantity of native tobacco [12] placed within. The herbalist then lights his pipe and smokes, meanwhile making the following appeal to the Creator and to the Spiritual forces which govern vegetation. The songs and properties are regarded as personal property and the accompanying medicine-gathering prayer of Witapanóxwe is regarded as typical.

MEDICINE GATHERING PRAYER (free translation)

"Grandfather, I come now for medical treatment. Your grandson (name of suppliant) needs your aid. He is giving you a smoke-offering here of tobacco. He implores you that he will get well because he, your child, is pitiful. And I myself earnestly pray that you take pity on him the sick one, I wish for him to get well forever of that which is causing pain in his body. For with you alone rests the spiritual power sufficient to bless anyone with, and hear now him our Grandfather tobacco, I beg of him that he will help me when we plead with earnest heart that you will take pity on your grandchild and that you will accept this appeal. I am thankful, Grandfather, also Creator, that you grant our appeal this day for all that we ask.[13] I am thankful, Grandfather. That is enough for this time."

Upon the conclusion of this propitiatory rite the medicine person searches out another plant of the same species, which if clean and healthy-looking, is then gathered. It is now ready to be treated in accordance with the rules governing the preparation of roots and herbs in the accompanying pharmacopeia. If the root of a plant is to be used in making medicine, it is gathered at the season when the vital properties are present; similarly the stalk or leaves each are gathered at the proper seasons.

[11] Harrington (1921, p. 26) in reference to the manitowuck to whom the Indians pray, says, "These are mentioned in the ritual of the Annual Ceremony and the people often pray to them when gathering herbs or preparing medicines, at the same time offering tobacco." He also says (p. 51) that, ". . . Some seem to have prayed to the four directions, other to the presiding genius of the species of the plants they sought or to the spirit of the individual plant itself."

[12] "Real tobacco" (Nicotiana rustica), to which a Delaware term meaning, "our grandfather," is also given.

[13] The proper phrase in full is, "give us what we ask for." It is abbreviated here to suit the formula.

The herbalist, before using herbs previously gathered and dried, performs the same rite of smoking and prayer. If the plants are being gathered for future rather than for immediate use, an appeal is made to the Creator to bless the plants and render the remedies effective in curing the future ills of his grandchildren.

The custom of offering prayers before the gathering and preparation of medicinal plants is not observed exclusively by the medicine men but is known to every Delaware. However, it was remarked that many fail to adhere to the ancient rite.

In observing Wi·tapanóxwe I was charmed by the delicate and reverential manner in which he handled the plants secured and arranged for this study. At this time he emphasized the idea of conservation, stating that one should gather only what was needed, and that vegetation in general should not be subjected to ruthless treatment.

Purity means much to the conservative Delaware and so the pure plants, as taken from Mother Earth, must not be defiled. It is therefore important that in order to avoid contamination no metal should come in contact with plants that are to be used in the treatment of disease. Roots and plants are allowed to dry in the sun, its rays lending them added potency. In this connection it is considered highly beneficial for a convalescing person to lie directly in the sun, so that its strengthenings qualities may be transferred to him. After the process of curing, roots and leaves are prepared by crushing them in a non-metallic receptacle, a stone basin or a wooden mortar being used for the purpose.

The herbalist smokes and offers a prayer while the medicine is being prepared and is always careful to stir it in the same direction—from left to right. One should never blow upon the concoction to cool it; to do so would represent an affront to the spirit of the plant.

The most able practioner will not treat himself when ill, nor a sick member of his family, but always calls upon the service of another.[14]

If an herbalist or sweat doctor, after diagnosing a case, feels that it is beyond his power to effect a cure, he will send the patient to another more capable of treating him successfully. Sometimes a sick person

[14] Zeisberger *(op. cit.* p. 25) "If one should know enough to help himself, being able to prepare *Beson*, and became ill, he will rarely treat himself, having the superstitious belief that what is prepared by himself will be of no benefit. Using what has been prepared by another, he believes, will bring relief."

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will visit several doctors in succession before finding one who has knowledge of preparing a remedy for his particular illness.[18]

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The person, either male or female, known by the term meaning "one who uses medicine for magic purposes," apparently had a larger number of patients in early times than the type of practitioner previously described. Zeisberger (*op. cit.*, p. 25), and Heckewelder (*op. cit.*, p. 231), from whom this impression is obtained, give rather detailed accounts of their seemingly weird practices. Both writers attribute the popularity of this group of healers to their feigned ability of dispelling the charms of evil sorcerers whom the Indians constantly feared. Witapanóxwe clarifies the distorted impressions implicit in these accounts by his interpretation of the procedure employed in treatment. The herbalist was called upon to aid individuals who have experienced difficulty in their marital relations or who have tried unsuccessfully to win the favor of a lover. Others came to him to be freed from malevolent influences. His power was not, however, limited to the control of human beings but extended to animals as well. Such a person was truly a "powerful man." This great power was entrusted with the admonition that it must never be used for malevolent purposes. Like the group of practitioners previously mentioned, the code of such people was based upon profound faith in the Creator, strict observance of the laws of nature and a deep regard for the traditions of their tribe.

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The plants employed by such an herbalist were of the rarest and most powerful kind. Their habitat and medicinal properties were not known to ordinary individuals. Such plants were unable to withstand the progress of civilization because, as my informant put it, "they could not live in unclean surroundings." The preparation made from these rare flora was known to the Delaware as "medicine for magic use," or "love medicine" (Zeisberger, *op. cit.*, p. 83). It was regarded as a gift, not to be used upon ordinary occasions but only in cases of emergency.

[18] Zeisberger (*ibid.*, p. 55) states that "Concerning plants and roots of medicinal value, it would be possible, if one were to devote himself to inquiry, to secure a great deal of information from the Indians for what one does not know another does, each man and woman having some knowledge in this direction, some more, some less. Hence, the custom that a patient who has consulted an Indian and secures a medicine from him without, however, being benefited, will go immediately to another; if no relief is obtained through his advice, the patient goes to a third, a fourth, until he finds one whose medicine helps."

nature of the disease. The flesh of animals and fowl is excluded from the diet and in the case of fever, red or fox squirrel flesh is not eaten. This food taboo is known to the Delaware by a native word meaning "makes you sick." Corn hominy, however, is administered in most cases, as it is considered to be a nourishing food.

In the case of childbirth, salt is not eaten for ten days. Onions are given the mother to produce milk, but care must be taken not to use a quantity such as to cause nausea for the child and mother.

During the catamenial period a woman is not allowed to prepared food nor taken an active part in domestic affairs.[33] The separate dishes assigned to her at that time, may only be used by her husband. Food cooked by such a woman would produce tuberculosis in others in a short time. A term translated as "gives dirty food," is applied to such a practice and refers to the resultant poisonous effects. During her periodic isolation a woman herbalist must refrain from preparing remedies or participating in any of the ceremonies.

Divinatory Curing Practices

Certain acts of a divinatory nature are performed upon selection and preparation of plants, roots, and bark employed in making medicine. Only plants that are clean and well developed, with the roots free from knotty growths, are taken. When seeking bark, the medicine gatherer selects a sturdy, well-formed tree for the purpose. The bark growing on the east side of a tree is preferred for its greater strength-giving properties received from the morning sun.

In gathering medicinal supplies, the materials are inspected for a clue as to the course of the treatment. Thus, if roots appear rough and knotty, the patient will be difficult to cure; if clean and well-formed, it will be an easy task to restore his health. Another practice is to place some crushed leaves or roots in running water. If the substance sinks to the bottom of the stream, the patient for whom it is prepared, will die; if it floats, a speedy recovery is assured.

When all other remedies have failed, an emergency medicine is sometimes made from scrapings of deer antler. During its preparation a prayer is offered to the animal from which the antler was obtained. Witapanóxwe related an incident in which a trial was made by means

[33] The puberty ceremony for young girls and the periodic isolation of women is described by Zeisberger, *ibid*, pp. 75-77.

of this substance. His niece was preparing it for a small child who was dangerously ill. She dropped a small quantity in a cup of hot water and observing it settle to the bottom, knew that the small patient would not recover. The medicine was administered as a tea, but the child died in a short time.[83]

In the making of an emetic, the necessary water should be dipped from the stream *with* the current;[84] for a cathartic, *against* the current. A similar regulation applies to the gathering of bark; for use as an emetic, the bark is peeled upward; for a cathartic, downward.

Formerly there were among the Delaware, as among other tribes, certain men and women whose supernatural power enabled them to communicate with the dead, to locate lost persons and objects and to foretell coming events. This practice was known as "locating or foretelling," and one who possessed such power was known as a "man who tells of the future." The source of this extraordinary power was attributed to one's guardian spirit or in some instances to the spirits of the dead. Those who were able to communicate with the dead usually performed at night. Such a person was also thought able to cure paralysis.

Some individuals who possessed the power to stay under water for a period of several hours at one time, were frequently called upon to locate a drowned person or a submerged object. One man was known to have found the body of a drowned person after months of futile searching by others. Some years later, the son of this shaman, after becoming converted to Christianity and studying for the ministry, finally persuaded his father to abandon the native faith and join the Christian church. In doing so the old seer, forsaken by his supernatural guardian, forfeited his magical power. Later the old man returned to the Delaware religion, but the power which enabled him to be of service to his tribesmen, was gone forever.

Witapanóxwe's grandfather was one of the last of the Delaware to possess such extraordinary mental and physical powers. He was able to perform the submersion feat and several times located the bodies of persons who had drowned in the rivers of Kansas. On one occasion a

[83] In reference to remedies for fever, Zeisberger observes (*op. cit.*, p. 55) that "when a patient has been given a dose, they are generally able to tell by its workings whether he will recover or die. If he does not retain the medicine it is regarded as a sign that he will hardly recover."

[84] This practice was noted by Heckewelder, *op. cit.*, p. 224.

CURATIVE PRACTICES AND HERBAL REMEDIES

757 HERBAL REMEDIES recorded here may be divided arbitrarily into two groups—the simple and the compound. In the former group, one, two, or three different plant parts are mixed together as contrasted with those remedies of the second group which includes from seven to twenty vegetal substances, according to the specific sickness encountered. My informant stated that "man needs medicine made from many different plants to act upon his bodily organs, afflicted by the ills from which he suffers." Frequently Wi·tapanóxwe uses as many as fourteen different plant substances in making up certain medicines, while other herbalists are said to compound theirs from seven or more elements.[1] Thus we may cite the predominant occurrence of compound remedies among the Delaware in contrast to the simple remedies of the eastern and northeastern Algonkians (Speck, 1917).

757 The bark preparations noted immediately below are called "single" (simple) remedies by my informant, and are employed as a cathartic. In preparing and administering these medicines, the correct procedure should be carefully followed in each case. To avoid nausea, bark is customarily removed from smaller twigs and branches rather than from those of larger size. In the preparation of 1 b, c, d, and e, the branches are not roasted as in 1 a.

1. (a) BLACK WALNUT *(Juglans nigra)*, "round nut tree." Three slender branches are roasted in the open fire. The bark from each is then removed, by peeling from the tip end[2] and tied in separate bundles. A strong tea is made by boiling these three bundles of bark together and large draughts taken occasionally. To remove bile from the intestines, the treatment is continued for two days. The leaves are scattered about the house to dispel fleas while the sap is a good application for any inflammation. Juice from the green hull of the fruit is rubbed over the infected area to cure ringworm, "contagious skin disease."

[1] The native use of twelve different medicines which cause one to vomit and "thus remove his sins" is mentioned by Zeisberger, *op. cit.*, p. 134. Elsewhere (p. 35) he states that occasionally the Indians are able to effect a cure with only two or three kinds of roots. If a simple remedy does not bring relief, twenty or more are used.

[2] To cause vomiting, the bark is peeled upward on the branch.

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(b) Mulberry *(Morus nigra)*, "surrounding berries tree."
(c) Yellow Birch *(Betula lutea)*, "yellow willow."
(d) White Ash *(Fraxinus americana)*, "brittle tree."
(e) Buckthorn *(Rhamnus caroliniana)*, "buckthorn."

2. Honey Locust *(Gleditsia triacanthos)*, "accidentally thorned." The bark of the following species, honey locust, prickly ash, wild cherry, and sassafras are combined for a general tonic. This medicine is used for a severe cough and to purify the blood.

3. Sycamore *(Plantanus occidentalis)*, "shedding bark." The bark of the sycamore and honey locust are steeped for a gargle to relieve hoarseness and sore throat. Three chips taken from the east side of the honey locust and sycamore trees are steeped together with red oak bark and sweet flag root to make a hot drink for colds.

4. Chestnut *(Aesculus glabra)*, "big acorn tree." Nuts ground up and mixed with sweet oil or mutton tallow to make poultice for earache. A nut carried in the pocket will relieve rheumatism. Nuts ground up for use as fish poison in streams. This is known as "fish peyote," as it makes them "dizzy" and they can be caught easily.

5. Sassafras *(Sassafras albidum)*. Bark of the root, together with other bark, used as a blood purifier. In spring employed as a beverage.

6. White Oak *(Quercus alba)*, "gray tree." Bark is a valuable substance in Delaware medicine and is used in compounding many remedies. For a severe cough, a tea is steeped from the bark. For sore throat a stronger liquid is used as a gargle. Also makes an excellent douche; liquid used to cleanse bruises and ulcers.

7. Pin Oak *(Q. palustris)*, "black acorn tree." Infusion of inner bark given for intestinal pains. The acorns are edible.

8. Red Oak *(Q. rubra)*, "red oak." Bark is steeped to make a tea for severe cough. Will also relieve hoarseness.

9. Black Oak *(Q. velutina)* "bitter tree." Inner bark used for colds and hoarseness. Infused for tea and gargle.

10. Redbud *(Cercis canadensis)*, "red bud." Bark steeped in cold water for a drink to reduce fever and stop vomiting.

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11. Cottonwood *(Populus deltoides,* or *Sargentii)*, "tree with moving leaves." Bark from the black haw, wild plum, and cottonwood are combined to make tea for weakness and debility in women.

12. Black Haw *(Viburnum prunifolium)*, "berries-in-sight tree." Bark taken from the root is combined with leaves of bloodroot, wild plum, pearly everlasting, "stone root" and bayberry to make a tonic to strengthen the female generative organs.

13. Elm *(Ulmus americana)*. Inner bark steeped and liquid drunk for colds and severe coughs.

14. Dogwood *(Cornus florida)*. The root is combined with others to make a tonic. In another variety *(C. canadensis)*, "arrow wood," the bark is combined with that of other species to relieve body pains.

15. Peach *(Prunus persica)* leaves are infused to expel pin worms and to stop vomiting in children. A small quantity is sweetened and is drunk occasionally until relief is felt.

16. Holly *(Ilex opaca)* is designated as the "red berry tree." It is believed that holly grows up near the place where a person was frightened. If one became suddenly frightened, he remarks, "I guess holly will grow here because I was scared so badly."

17. Grape *(Vitis rupestris)*. Vine is combined with bloodroot, pearly everlasting, "star root" *(sp.?)*, false spikenard, peppermint, and sarsaparilla to make a tonic for frail women. It is also said to increase fertility.

18. Fox Grape *(V. vulpina)*, "sour berry tree." Sap of the vine valuable in treating leucorrhea and when removed in spring, beneficial for the hair.

19. Elder *(Sambucus canadensis)*, "hollow tree." The leaves and stems act as a blood purifier, also used in the treatment of jaundice. From the elder flower, a tea is made for colic in infants. The bark scrapings are used in making a poultice for sores, swellings, and wounds.

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20. Hops *(Humulus lupulus)*. The blossoms are employed in medicine for nervousness. A small bag filled with hops and heated is useful as an application to relieve earache or toothache. A tea made from the plant acts as a tonic-stimulant.

[752] 21. Dwarf Sumac *(Rhus copallina)*, "kinnikinnick tree." Roots pounded and applied as poultice for sores and skin eruptions. An

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infusion of the leaves is used to cleanse and purify skin eruptions. To treat venereal disease an infusion of the roots is taken. The berries are useful in making a mouth wash.

22. Wild Cherry *(Prunus serotina)*, "excrement tree." Bark used as remedy for diarrhea. Also combined with other roots and bark as a tonic. The fruit is sometimes used to make cough syrup.

23. Ginseng *(Panax quinquefolium)* is named "man and woman," a term descriptive of the human-like form of the root. The terms "Grandmother" and "Grandfather" are also given the plants, because they are usually found growing in pairs. The root is regarded as being very potent by the Delaware and may be used in treating either sex. In treating males, the "male root" is used, and vice versa. Plant is believed to have retreated, like others, before the advance of civilization and hence, is rarely found. It possesses medicinal properties which will, in many cases, effect cures where all others have failed. The root is diced in small particles, a tablespoon of which is added to a cup of hot water to make tea. The root is used with other plant parts as a general tonic.

24. "Frost" or "Ice" Weed *(Helianthemium canadense)*, was revealed to a Delaware in a dream in which the plant said, "I am strong and great. Stronger than any other plant because I remain green later in fall. Use me and you will become strong." Root used in making poultice for sore throat. Tea infused from plant taken at same time.

25. Poke *(Phytolacca decandra)*, "purple berry." The root of this plant is combined with the bark of sarsaparilla and mountain grape to make a remedy for rheumatism. It acts as a stimulant and blood purifier. In preparing the medicine, the root of the poke is first thoroughly roasted and then crushed. To avoid nausea, a small dose is customary.

26. Poison Ivy *(Rhus toxicondrendon)*, "irritating" or "blistering" vine. Not poisonous to everyone. The root contains valuable medicinal properties. A poultice is made from the roasted, crushed root. A salve effective for chronic sores and glandular swellings is made from the roots of poke (roasted), bittersweet, yellow parilla, and the bark of elder. These ingredients are placed in boiling tallow or lard, to which is added a medium-sized piece of beeswax. A more modern formula calls for the addition of one-fourth ounce of carbolic acid and two ounces of menthol crystals.

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27. Angelica *(Angelica atropurpurea)*, "to mix with smoking (tobacco)." Root used for stomach disorders; seeds sometimes mixed with smoking tobacco.

28. Anise *(Pimpinella anisum)*. Root used as a cathartic and stomach tonic.

29. Yellow Jasmine *(Gelsemium sempervirens)*, "yellow root." Root used as blood purifier.

30. The root of Staghorn Sumac *(Rhus typhina)*, "Cherokee sumac" is combined with that of "horse-hobble weed" or purple cone-flower *(Brauneria purpurea)* as a remedy for venereal disease. The patient should refrain from eating sour fruit and greasy foods. Water should be taken freely and often. [262]

31. Boneset *(Eupatorium perfoliatum)*. The root and occasionally the leaves are infused as a treatment for chills and fever.

32. Goldenrod *(Solidago juncea)*. The green leaves are chewed or infused to cure diarrhea. Also used to reduce fever.

33. Wintergreen *(Gaultheria procumbens)*. Entire plant is compounded with poke root, mullein leaves, wild cherry bark, and black cohosh bark *(Sp.?)* to make a tonic. Beneficial also for rheumatism.

34. Blackberry *(Rubus nigrobaccus)*. The vine is combined with wild cherry bark to cure dysentery.

35. Dock *(Rumex obtusifolius* and *R. crispus)*, "curly leaf." Root used as a blood purifier and remedy for jaundice.

36. Black Snakeroot *(Cimicifuga racemosa)*, stone root *(Collinsonia?)*, and root of elecampane *(Inula helenium)* are compounded to make a tonic.

37. Golden Aster *(Chrysopsis mariana)*. Tea made from the root to quiet infants. Also acts as tonic for sickly children.

38. "Turkey Foot" *(Sp.?)*, "leaves like turkey foot." Plant tip and root infused as a tea for weak women.

39. Prairie Moss *(Sp.?)*. Leaves used as poultice for sore throat. Plant infused as tea, called "tonsillitis medicine."

40. Cardinal Flower *(Lobelia cardinalis)*. An important plant for the Delaware herbalist. Tea made from the root used for typhoid. Administered in small quantities because of its strength.

41. Sage Willow or "red root" *(Salix tristis)*. Contains valuable medicinal properties of importance to Delaware herbalists. Tea

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made from root for women suffering displacement of womb. Used, together with roots of prairie willow *(Salix humilis)*, little burr *(Dentaria diphylla)* and false Solomon's seal to make a tea to treat scrofula and venereal disease.

42. Rattle-box *(Crotolaria saggitalis)*, "blown-over weed." A medicine for venereal disease is made from the root. It is a very strong narcotic.
43. Hedge Nettle *(Stachys palustris)*, "smart weed," is combined with common nightshade, "pretty flower," and button snakeroot to make a medicine for venereal disease.
44. Purple Cone-flower *(Brauneria purpurea)*, "white flower." This is called "Yuchi gonorrhea medicine" by my informant. A tea made from this root alone will cure an advanced case of venereal disease in seven days.
45. Ragweed *(Ambrosia artemisiaefolia)*. Plant used in making a poultice to apply as a preventative of blood poison.
46. Button Snakeroot *(Eryngium aquaticum)*, "to vomit." Used as a medicine for intestinal tape and "pin" worms.
47. Horsemint *(Monarda punctata)*. A tea made of the plant for fever, and to bathe face of patient.
48. Bayberry *(Myrica sp.)*. The bark is used as a blood purifier, and for kidney trouble.
49. Sweet Fern *(Myrica asplenifolia)*. Plant is steeped and liquid applied to blisters. Also combined with mallow root, elder flowers and dwarf elder to treat inflammation of the bladder. It is also good for scrofula. Is a blood purifier and useful in removing mucus from the lungs.
50. Pipsissewa *(Chimaphila umbellata)*. The plant is steeped and the liquid is applied to blisters. It is also combined with mallow root (?), elder flowers and dwarf elder bark in medicine for inflammation of the bladder. Also for scrofula. Purifies the blood and tends to aid in removing mucus from the lungs.
51. False Pennyroyal *(Hedeoma pulegioides)*. A tea is made from the leaves to relieve stomach pains.
52. Wild Carrot *(Daucus carota)*. Blossoms picked at full bloom are steeped as tea for diabetics.
53. Yarrow *(Achillea millefolium)*. A tea is made from the plant for disorders of the liver and kidneys.

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54. Prickly Ash *(Xanthoxylum americanum)*. "Bush with briars" or "little thorn bush." Inner bark steeped as medicine for heart trouble. A small quantity is taken each day for three days, and after three days, the treatment is continued.

55. Wintergreen *(Gaultheria procumbens)*. A tea made from entire plant is taken for kidney disorders.

56. Cattail *(Typha latifolia)*. Medicine made from the root to dissolve kidney stone.

57. Partridge Berry *(Mitchella repens)*. A tea is made for suppressed menstruation. This remedy strengthens the female generative organs. In the treatment of rheumatism, the "herbal steam" treatment is considered of great value. A strong infusion is made from the roots or twigs of one of the medicinal plants useful for this type of sickness. The patient is seated with his feet in a basin of the liquid, made very hot, and a blanket then wrapped around the lower part of his body. Cold damp cloths are applied to the head during the steam treatment which lasts an hour or less. The upper portion of the body may also be steamed by raising the level of the blanket. This treatment is effective in reducing muscular swellings and stiff, aching joints. The following vegetal materials are used singly in this way:

58. (a) Bull Thistle *(Cirsium lanceolatum)*, "pretty flower."
(b) Poke.
(c) "Frost Weed."
(d) "Expert remedy," unidentified.
(e) Cedar *(Juniperus virginiana)*[9] particularly the twigs.
(f) Hemlock *(Tsuga canadensis)*.
(g) Dwarf Sumac.
(h) Hop Vine.

59. Blue Flag *(Iris versicolor)*, "blue flower" or "top like calamus." Medicine made from the root is valuable for rheumatism, scrofula and disorders of the liver and kidneys. Combined with the root of sevenbark *(Hydranga aborescens)*, it is used for gall stones.

60. Great Mullein *(Verbascum thapsus)*, "gray leaf." The leaves are heated and applied to the joints and body to allay rheumatism pain and reduce swelling. These leaves are combined with coltsfoot *(Petasites palmata)*, plum root, and glycerine to make a healing

[9] Speck, 1931, pp. 47, 127, 151, 171.

syrup for catarrh, coughs, and lung trouble. In preparing this remedy, the mullein must be gathered before the plant blooms.

61. Burdock *(Arctium minus)*, "big-leaved burr." A tea made from the root is good for rheumatism. Acts as a stimulant and blood-purifier.
62. Butterfly Weed *(Asclepias tuberosa)*, "where butterflies light." Root used as a remedy for pleurisy and rheumatism. Also administered to women following child-birth. Rattlesnake plantain *(Epipactis pubescens)* has the same term and is used in the same way.
63. Elecampane *(Inula helenium)*, "leaves like Indian cabbage." Root used in making a tonic, useful for strengthening digestive organs and to remove mucus from the intestines.
64. Toothwort *(Dentaria diphylla)*, "little burr." Root combined with other as a stomach remedy.
65. False Indigo *(Baptisia tinctoria)*. Liquid infused from root used in cleansing cuts and ulcers. Also employed as a douche.
66. Jimson Weed *(Datura stramonium)*. The leaves are crushed and applied to fresh wounds as a poultice. A salve for treating piles is made by pounding the seeds and mixing with tallow.
67. Common Plantain *(Plantago major)*, "path weed." Leaves crushed and used as a poultice. Plant combined with other plant parts is useful in treating female diseases.
68. Climbing Bittersweet *(Celastrus scandens)*, "yellow root." Root prepared as a poultice or salve for skin eruptions. Tea made from the root will clear up liver spots.
69. Skunk Cabbage *(Symplocarpus foetidus)*. A tea made from the root is useful in treating whooping cough. The leaves are crushed and used as a poultice to allay pain. People suffering from epilepsy often roll up a small portion of the leaf and chew it.
70. Sweet Flag *(Acorus calamus)*, "bitter." Root used in making tea useful for coughs, colds, and suppressed menses. Combined with sassafras root for intestinal pains.
71. Heal-All *(Prunella vulgaris)*. The plant top is used to make a cooling drink and body wash for fever.
72. Skull-Cap *(Scutellaria galericulata)*. The plant top is a stomach stimulant, and a laxative.
73. Catnip *(Nepeta cataria)*, "smells good." The leaves are prepared with peach seed to make a syrup, very beneficial for children.

757 74. MOTHERWORT *(Leonurus cardiaca)*. A tea is made from the leaves ●278 which is effective for female diseases.

75. FALSE SOLOMON'S SEAL *(Smilacina stellata)*. The root is combined with others as a medicine to cleanse the system and stimulate the stomach. A remedy also for leucorrhea.

76. MAY APPLE *(Podophyllum peltatum)*, "flower hangs down." A spring tonic and a laxative are made from the root.

77. BLOODROOT *(Sanguinaria canadensis)*. For general debility, a pea-sized piece of root is taken every morning for thirty days. Combined with other roots for a stomach remedy. The plant root provides the face paint used in the Big House Ceremony of the Delaware. [302 386]

78. DANDELION *(Taraxacum officinale)*. A laxative-tonic obtained from the plant.

79. VIRGINIA SNAKEROOT *(Aristolochia serpentaria)*. Used singly or combined with wintergreen as a tonic.

80. FRINGED GENTIAN *(Gentiana crinita)*. A tea made from the root acts as a blood-purifier and stomach-strengthener.

81. BLACK SNAKEROOT *(Cimicifuge racemosa)*, elecampane and stone root are combined to make a tonic.

82. MILKWEED *(Asclepias sp.)*. A tea made from the pounded and steeped roots of the five species of milkweed is a cure for epileptic fits in those born during certain phases of the moon. Such disturbances periodically occur during a particular moon-phase period.

751 83. PEYOTE *(Lophophora williamsii)*, "Our Father," is known to have 757 been used to treat periodic fits, and is regarded as a sure cure 278 for tuberculosis.[4] Wi·tapanóxwe carries a small, fringed leather 787 bag, tied with deerskin thongs, containing several peyote "beans" or buttons for use in case of emergency. Certain Delaware subscribing to the "Wilson cult," wear a small beaded bag containing peyote, around their necks as a protection against illness. This talisman is even regarded as an advisory agent of approaching

[4] It is said that this highly valued and potent medicine was revealed to a woman in a dream who gave the knowledge of it to her people. It may be eaten with or without the usual ceremonial rites. For a study of the Peyote rites among the Delawares at Dewey and Anadarko, Oklahoma, see Petrullo, 1934. For more details, consult Safford, 1916, pp. 387, 424; Harrington, 1921, pp. 185-190; and the more recent study of LaBarre, 1938.

domestic and tribal crises. Witapanôxwe is not convinced of the truth of this statement, but claims that he merely carries his own supply for medicinal purposes.[5]

84. Cactus *(Opuntia vulgaris)* is called "thorny, useless." Witapanôxwe remarked that the Oklahoma negroes singe off the spines and apply a sliced portion to their corns to allay pain.

Miscellaneous Beliefs

1. To draw out frost bites, walk in the snow barefooted. Rubbing snow on the ears will bring relief.
2. Frost or dew gathered in late fall and rubbed on the body will prevent skin eruptions.
3. Water that collects in hollow trees or rocks is believed to have medicinal value.
4. Mud applied to a burn will take out "the fire."
5. To cure a child from slobbering, catch a number of minnows and have the child hold them in his mouth. Repeat this several times a week until the cure is effected.
6. To cure a child of bed-wetting, feed him portions of a roasted "timber rat" * This is believed to effect a sure cure. My informant and a companion once killed and roasted such a rodent, and both agreed that the flesh was palatable and not unlike that of squirrel. They were reticent, however, as to the therapeutic effects.
7. Relief is obtained in the case of whooping cough, if the mother first suckles a puppy and then her child.
8. A spider web applied to a flesh wound will stop the flow of blood.
9. Excrement of cattle or of poultry is employed as a poultice for boils.
10. Skunk-oil is regarded as a valuable remedy for colds and croup. For children the average dose is from three to five drops. A small quantity may be used externally on the throat and chest. Oil obtained from geese is employed similarly for colds. Skunk scent or rabbit urine is put into the ear to relieve earache. Deer and otter scent are also useful for medicinal purposes.

[5] This practice corresponds to one general among Eastern Algonkian peoples—that of carrying a piece of "muskrat root" *(Acorus calamus)* about the person as a disease preventive. A piece of the root is chewed in case of sudden illness.

* Compare use of a white-footed mouse for the same purpose among the Gayhead Indians (Tantaquidgeon, 1930, p. 20).

11. A syrup made by roasting onions is taken for colds. For infants and small children the syrup is sweetened and a few drops taken clear or in milk.

12. Mutton tallow is an emollient for chapped and irritated skin. It is used to make ointment.

13. Muscular cramps may be relieved by bathing the affected parts with urine.

14. A tea made from roasted, charred pig hoofs is beneficial for colds.

15. For snake bite suck the venom from the wound with a hollow piece of deer antler.

16. Treatment of sick horses. Years ago, after their migration westward, the Delaware used horses for travel. Often their animals would become ill during hunting activities on the Western plains. This was believed due to unsuitable drinking water or from eating poisonous weeds. Other disabilities were due to "bots"[6] or colic. For colic, strong tobacco juice, or gun-powder dissolved in hot water was administered. The most effective treatment was to throw a bucket of very hot water containing finely chopped bits of weasel hide[7] over the horse. Then the owner would force his weight up and down on the animal's abdomen or occasionally, beat it with a wet, heavy blanket for ten or fifteen minutes. The horse soon recovered and was again on his feet.

Warrior's Medicine

Warriors long ago also received gifts from supernatural agencies which enabled them to excell in feats of bravery. Their power came in dream-visions in which the identity of the supernatural was made known. Sometimes a power-song was granted at the same time. Certain men were appointed as leaders of the warriors and custodians of the secret formulæ, from which a particular preparation called "warrior medi-

[6] The larvæ of certain flies. Eggs are laid on the inside of the animal's foreleg, gain entrance into the blood stream and are carried to the alimentary tract where incubation takes place.

[7] The hide of the so-called "spotted weasel" is used for this purpose. My informant had never seen this animal but it had been described to him by his mother. It may refer to the ordinary weasel at the period of seasonal pilage change from brown to white. The species known to the Delaware are the Bonaparte (*Mustela cicognani*), and New York weasel (*M. noveboracensis*), Anthony, 1928, p. 102.

4:Tantaquidgeon E-5 (1930) 1942
NM7 Delaware NM7

APPENDIX II

USES OF MEDICINAL PLANTS AMONG THE CANADIAN DELAWARE

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THE following notes on the medicine practices of the Six Nations Delaware, Grand River Reserve, located near Hagersville, in Brant County, Ontario, Canada, were recorded during a visit to the reserve in November, 1931. The group consists of about 150 individuals of mixed Indian and white blood. Only a few, however, have any knowledge of the language and traditions of the Delaware who once inhabited the section of the country now known as Pennsylvania, New Jersey, and New York. To find the identity and location of the predecessors of the band now in question, who migrated to Canada, will be impossible until a comparative study has been made of the various vocabularies.

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I am indebted to Mrs. Martha Peters Hill, Nicholas Powless, his sister, Mrs. Maracle, Joseph Montour, John Lickers, and Walter Moses for aid in securing the Delaware information herein presented.

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In contrast to the ceremonies connected with the various processes of healing as employed by the Oklahoma Delaware, we find only a few traces of such rites among the Delaware of Canada. Plant parts to be used for medicinal purposes should be gathered when the vital properties are in that part of the plant (the flower, root, etc.), to be used. One informant added that plants should be gathered before the fireflies appear. When seeking herbal plants, the first of the desired species should not be plucked. It is customary to pass on to another of the same variety and there dig a small hole beside the plant and in it place an offering of tobacco. If a large quantity of herbs were gathered, they were tied in bundles and allowed to dry in the sun, to prevent mould. Some dried their plants in a warm room.

When bark is used it is taken from the east side of a tree; only the inner bark, which is usually peeled downward, is used. Roots may be scraped or cut into small portions.

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Medicinal plants are regarded as being sensitive to handling, and when brewing medicine, care must be taken to refrain from stirring the mixture while it is steeping. After being thoroughly steeped, the medicine is removed from the fire, and if necessary, stirred only toward the

right. It is never cooled by blowing upon it. Running water should be used, and it was customary in former times to dip the water with or against the current, or to submerge the container and allow the water to flow in from all sides.[1]

The term *"doctol,"* from English doctor, was the only term for an herbalist obtainable from those interviewed. It is also said both men and women could become practitioners. When calling upon a doctor for treatment it is customary to offer him a present of money. In former times, cloth, tobacco, and other gifts were offered.

GREAT MULLEIN *(Verbascum thapsus)*.

The leaves are crushed and applied as a poultice to bruised surfaces to reduce swelling and allay pain.

NANNYBERRY *(Viburnum lentago)* and mullein leaves are steeped and the tea administered in case of measles.

LIVE-FOREVER *(Sedum telephioides)*

The leaves are crushed and used as a poultice to draw out poison. My informant regarded this to be a most powerful and effective application. He stated that he had suffered from a serious case of infection which resulted from stepping on a rusty nail and that the above remedy cured him in a short while.

PLANTAIN *(Plantago major)*.

The leaves are crushed and applied to bruises.

BURDOCK *(Arctium minus)*.

The leaves are bound on the body to reduce pain. The root is used in making medicine for purifying the blood.

HORSERADISH *(Radicula armoracia)*.

The leaves are applied as a poultice in case of neuralgia.

BITTERSWEET *(Celastrus scandens)*.

The root is used for making medicine which is administered to persons suffering from consumption.

TANSY *(Tanacetum vulgare)*.

The plant is used in making medicine which is effective in treating disorders of the stomach.

[1] My informants could not explain this but said that the water must be dipped in different ways according to the nature of the disease to be treated. It is a common belief that water dipped *with* the current acts as a laxative and *against* it acts as an emetic. Allowing the water to flow into the container from all sides suggests the idea that the remedy to be made would tend to benefit the entire system.

278 757 BONESET *(Eupatorium perfoliatum)*.

This is considered to be a very powerful medicinal herb by my informants and it should be used with great precaution according to their belief. Tea made from the leaves is beneficial as a stomach medicine.*

ELECAMPANE *(Inula helenium)* root and poplar *(Populus tremuloides)* bark are steeped together and the liquid drunk to relieve a cold.

CATNIP *(Nepeta cataria)*.

A tea made from the leaves is regarded as a soothing drink for infants.

WHITE PINE *(Pinus strobus)*.

The twigs are steeped to make a medicine which is effective in treating disorders of the kidneys. It is also administered to persons suffering from pulmonary diseases.

[752] The pitch is applied to boils to draw out the poison and reduce the pain.

SWEET FLAG *(Acorus calamus)*.

The root is scraped and hot water poured over it and drunk in case of colds.

BLOODROOT *(Sanguinaria canadensis)*.

A small quantity of the powdered root is added to a half a cup of lukewarm water and a teaspoonful to stop vomiting. The root is also used in combination with other plants in making a blood purifier.

YELLOW OAK *(Quercus muhlenbergii)*.

To stop vomiting, pour water over a piece of the bark and when the water becomes a yellowish tinge drink a small quantity of it.

IRONWOOD or AMERICAN HORNBEAM *(Carpinus caroliniana)* root or bark, and the bark of juniper *(Juniperus communis)*, white oak *(Quercus alba)*, wild cherry *(Prunus serotina)*, and hickory *(Carya ovata)* are steeped together for a tonic. A small bundle of some of each is put into about a pint of water. The mixture is steeped down

*This plant so commonly used by both Indians and whites in those sections of eastern North America where it is indigenous, appears to be regarded as being too powerful to be tampered with by the Six Nations Delaware informants. The Oklahoma Delaware, however, use the plant freely.

to about half the quantity. An equal part of brandy may be added. This is considered to be a month's treatment for one person and is considered to be effective in treating cases of general debility. It is valuable as a remedy for diseases peculiar to women.

My informant (Nicholas Powless) stated that he had bought the remedy, as is customary, from a Delaware herbalist. After a prolonged illness, during which time he was in the hospital, Mr. Powless was brought home, as he said, apparently to die. He obtained the formula just noted, made up the medicine and is taking it daily. He claims that he has continued to regain his strength and is slowly recovering from a complication of diseases pronounced incurable.

A tea made by pouring hot water over a small quantity of soot is given to babies in case of colic. A stronger tea is beneficial for a sick cow.

A powder obtained from decayed pine *(Pinus strobus)* is used for babies because of its healing properties.

SUMAC *(Rhus typhina)*.

A tea made from the berries is drunk as a remedy for diarrhea.

Skunk oil and molasses is taken for colds and cramp. The oil rubbed on the throat and chest sparingly tends to relieve congestion. Goose and raccoon oil are used similarly.

Rattlesnake oil is valuable in treating stiff joints. It is very powerful and should be used sparingly. Only a few drops on the finger tips and applied to the affected parts. The skin may be bound on the wrists and ankles to strengthen them.[8]

[8] When told of the belief that snake oil, if used alone, "will unjoint you," an idea common among the Wampanoag of Cape Cod, Mass., my informant laughed and said that he knew that it would not because he had used it on his joints with good results. His sister added that if he could obtain some rattlesnake oil, now he might keep in better condition.

4:Tantaquidgeon E-5 (1930) 1942
NM7 Delaware NM7

PLANTS AND PLANT USES OF

	Botanical Name	Common Name
222	1. *Achillea millefolium*	Yarrow
262	2. *Acorus calamus*	Sweet Flag
278	3. *Aesculus glabra*	Buckeye
824		
	4. *Agaricus campestris*	Mushroom
	5. *Allium canadense*	Wild Onion (small)
	6. *Amaranthus retroflexus*	Pigweed
	7. *Ambrosia artemisiaefolia*	Ragweed
	8. *Anaphalis margaritacea*	Pearly-everlasting
	9. *Angelica atropurpurea*	Angelica
	10. *Apios tuberosa*	Indian Potato, Groundnut
	11. *Apocynum cannabinum*	Indian Hemp
	12. *Aralia nudicaulis*	Sarsaparilla
	13. *Arctium minus*	Burdock
	14. *Aristolochia serpentaria*	Virginia Snakeroot
	15. *Artemisia frigida*	Wild Sage
	16. *Asclepias (5 species)*	Milkweed
	17. *Asclepias tuberosa*	Butterfly Weed
	18. *Baptisia tinctoria*	False Indigo
	19. *Betula lutea*	Yellow Birch
	20. *Brassica nigra*	Black Mustard
	21. *Brauneria purpurea*	Purple Cone-flower, "Horse-hobble weed"
	22. *Carya cordiformis*	Bitternut Hickory
	23. *Carya ovata*	Shell Bark Hickory
	24. *Carya glabra*	Pignut
	25. *Castanea pumila*	Chinquapin
	26. *Cercis canadensis*	Redbud
	27. *Chimaphila umbellata*	Pipsissewa
	28. *Chrysopis mariana*	Golden Aster
	29. *Cimicifuga racemosa*	Black Snakeroot
	30. *Cirsium lanceolatum*	Bull Thistle
	31. *Cornus canadensis*	Bunchberry
	32. *Cornus florida*	Dogwood
	33. *Corylus americana*	Hazelnut
	34. *Crotolaria saggitalis*	Rattle Box
	35. *Datura stramonium*	Jimson Weed

THE OKLAHOMA DELAWARE

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Native Use	Part of Plant Used	Type of Medicine
Medicine (liver and kidneys)	Entire plant	Simple
Medicine (cold, stomach-ache, suppressed menses)	Root	Compound
Medicine (poultice; utility fish poison)	Nut pulverized	Simple
Food		
Food		
Food	Use with others as greens	
Medicine (blood poisoning preventative)	Entire plant as poultice	Simple
Medicine (tonic)	Root	Compound
Medicine (stomach)	Root	Simple
Food	Root	
Mats		
Medicine (tonic)	Root	Compound
Medicine (rheumatism)	Root	Simple
Medicine (tonic)	Root	Compound
Medicine (ceremonial)	Leaves chewed	
Medicine (epilepsy)	Root	Compound
Medicine (rheumatism, healing drink following chiidbirth)	Root	Simple and compound
Medicine (wash for cuts, ulcers)	Root	Simple
Medicine (cathartic)	Bark	Simple
Food	Young shoots	
Medicine (venereal disease)	Root	Simple and compound
Food	Nuts	
Food	Nuts	
Food	Nuts	
Food	Nuts	
Medicine (reduce fever, stop vomiting)	Bark	Simple
Medicine (bladder, blood purifier)	Plant	Compound
Medicine (infants, frail children)	Root	Simple
Medicine (tonic)	Root	Simple and compound
Medicine (rheumatism)	Root	Simple
Medicine (body pains)	Bark	Compound
Medicine (tonic)	Root	Compound
Food	Nuts	
Medicine (venereal disease)	Root	Simple
Medicine (poultice for cuts)	Leaves, seeds	Simple

4:Tantaquidgeon E-5 (1930) 1942
NM7 Delaware NM7

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PLANTS AND PLANT USES OF

Botanical Name	Common Name
36. *Daucus carota*	Wild Carrot
37. *Dentaria diphylla*	Toothwort
38. *Diospyros virginiana*	Persimmon
39. *Epipactis pubescens*	Rattlesnake Plantain
40. *Eryngium aquaticum*	Button Snake-root
41. *Eupatorium perfoliatum*	Boneset
42. *Fragaria virginiana*	Strawberry
43. *Fraxinus americana*	White Ash
44. *Gaultheria procumbens*	Wintergreen
45. *Gaylussacia baccata*	Huckleberry
46. *Gelsemium sempervirens*	Yellow Jasmine
47. *Gentiana crinita*	Fringed Gentian
48. *Gleditsia triacanthos*	Honey Locust
49. *Hedeoma pulegioides*	False Pennyroyal
50. *Helianthemium canadense*	"Frost" or "ice" weed
51. *Humulus lupulus*	Hops
52. *Hydrangea aborescens*	Sevenbark
53. *Ilex opaca*	Holly
54. *Inula helenium*	Elecampane
55. *Iris versicolor*	Blue Flag
56. *Juglans nigra*	Black Walnut
57. *Juniperus virginiana*	Red Cedar
58. *Leonurus cardiaca*	Motherwort
59. *Lobelia cardinalis*	Cardinal Flower
60. *Lophophora williamsii*	Peyote
61. *Mentha piperita*	Peppermint
62. *Mentha canadensis*	Wildmint
63. *Mitchella repens*	Partridge Berry
64. *Monarda punctata*	Horse Mint
65. *Morus nigra*	Mulberry
66. *Myrica sp.*	Bayberry
67. *Myrica asplenifolia*	Sweet Fern
68. *Nepeta cataria*	Catnip
69. *Opuntia vulgaris*	Prickly Pear
70. *Panax quinquefolium*	Ginseng

OKLAHOMA DELAWARE—Continued

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Native Use	Part of Plant Used	Type of Medicine
Medicine (diabetes)	Blossoms	Simple
Medicine (scrofula, venereal disease)	Root	Compound
Food	Fruit	
Medicine (poultice; female disorder)	Leaves	Simple and compound
Medicine (venereal disease)	Root	Compound and simple
Medicine (chills, fever)	Root	Simple
Food	Berries	
Medicine (cathartic)	Bark	Simple
Medicine (tonic)	Plant	Compound and simple
Food	Befries	
Medicine (salve)	Root	Compound
Medicine (stomach; blood purifier)	Root	Simple
Medicine (tonic)	Bark	Compound
Medicine (pain in stomach)	Leaves	Simple
Medicine (strengthening)	Plant	Simple
Medicine (nerves)	Blossoms	Simple
Medicine (gallstones)	Root	Compound
Medicine (tonic)	Root	Compound
Medicine (rheumatism; liver; kidneys)	Root	Compound
Medicine (cathartic)	Bark	Simple
Medicine (rheumatism)	Twigs	Simple
Medicine (female disorder)	Leaves	Simple
Medicine (typhoid)	Root	Simple
Medicine (consumption; periodic fits; emergency med. charm)	"Bean" or "Button"	Simple
Medicine (tonic)	Leaves	Compound
Medicine (suppressed menses)	Plant	Simple
Medicine (fever)	Plant	Simple
Medicine (cathartic)	Bark	Simple
Medicine (female generative organs)	Root	Compound
Medicine (poison ivy)	Leaves	Simple
Medicine (tonic for children)	Leaves with peach seed	
Not used		
Medicine (effective in any severe illness. Most potent med.)	Root	Simple and compound

4:Tantaquidgeon E-5 (1930) 1942
NM7 Delaware NM7

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	Botanical Name	Common Name
71.	*Phytolacca americana*	Poke
72.	*Pimpinella anisum*	Anise
73.	*Plantago major*	Plantain
74.	*Platanus occidentalis*	Plane Tree
75.	*Podophyllum peltatum*	May Apple
76.	*Populus sargentii*	Cottonwood
77.	*Prunella vulgaris*	Heal-all
78.	*Prunus americana*	Plum
79.	*Prunus persica*	Peach
80.	*Prunus serotina*	Wild Cherry
81.	*Pyrus communis*	Pear
82.	*Pyrus coronaria*	Crab Apple
83.	*Pyrus malus*	Apple
84.	*Quercus alba*	White Oak
85.	*Quercus macrocarpa*	Bur Oak
86.	*Quercus velutina*	Black Oak
87.	*Quercus palustris*	Pin Oak
88.	*Quercus rubra*	Red Oak
89.	*Radicula nasturtium-aquaticum*	Water Cress
90.	*Rhamnus caroliniana*	Buckthorn
91.	*Rhus copallina*	Dwarf Sumac
92.	*Rhus toxicondendron*	Poison Ivy
93.	*Rhus typhina*	Staghorn Sumac
94.	*Ribes rotundifolium*	Gooseberry
95.	*Ribes triste*	Swamp Currant
96.	*Rubus canadensis*	Thimble Berry
97.	*Rubus nigrobaceus*	Blackberry
98.	*Rubus villosus*	Blackberry
99.	*Rubus occidentalis*	Black Raspberry
100.	*Rumex acetosella*	Sheep Sorrel
101.	*Rumex crispus*	Dock
102.	*Rhumex obtusifolius*	Dock
103.	*Salix humilis*	Prairie Willow
104.	*Salix tristis*	Sage Willow, "Red Root"
105.	*Sambucus canadensis*	Elder

OKLAHOMA DELAWARE—Continued

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Native Use	Part of Plant Used	Type of Medicine
Medicine (rheumatism)	Root	Simple and compound
Medicine (cathartic)	Root	Simple and compound
Medicine (poultice; also female disorder)	Leaves	Simple and compound
Medicine (colds, sore throat)	Bark	Compound
Medicine (laxative; love charm)	Root	Simple
Medicine (female disorder)	Bark	Compound and simple
Medicine (fever)	Top	
Food	Fruit	
Food	Fruit	
Medicine (tonic)	Bark, Fruit	Compound
Food	Fruit	
Food	Fruit	
Food	Fruit	
Medicine (antiseptic)	Bark	Compound
Food	Nuts	
Medicine (hoarseness)	Bark	Simple
Medicine (intestinal pains)	Bark	Simple
Medicine (hoarseness)	Bark	Compound
Root	Plant	
Medicine (cathartic)	Bark	Simple
Medicine (ceremonial tobacco mixture)	Leaves, Root	Simple
Medicine (salve)	Root	Compound
Medicine (venereal disease)	Root	Compound
Food	Berries	
Food	Berries	
Medicine (dysentery)	Vine, Berries	Compound
Berries used as food	Berries	
Food	Berries	
Food	Berries	
Food	Plant	
Food	Plant	Simple and compound
Medicine (food)	Root, Young Shoots	
Medicine (venereal disease)	Root	Compound
Medicine (womb displacement; venereal disease)	Root	Compound
Medicine (salve) (fruit edible)	Bark, Berries	Simple Simple

4:Tantaquidgeon E-5 (1930) 1942
NM7 Delaware NM7

PLANTS AND PLANT USES OF THE

	Botanical Name	Common Name
106.	*Sanguinaria canadensis*	Bloodroot
107.	*Sassafras albidum*	Sassafras
108.	*Scutellaria galericulata*	Skull Cap
109.	*Smilacina racemosa*	False Spikenard
110.	*Smilacina stellata*	False Solomon's Seal
111.	*Solanum dulcamara*	Bittersweet
112.	*Solanum nigrum*	Common Nightshade
113.	*Solidago juncea*	Goldenrod
114.	*Symplocarpus foetidus*	Skunk Cabbage
115.	*Stachys palustris*	Hedge Nettle
116.	*Taraxacum officinale*	Dandelion
117.	*Tsuga canadensis*	Hemlock
118.	*Typha latifolia*	Cat-tail
119.	*Ulmus americana*	American Elm
120.	*Vaccinium pennsylvanicum*	Lowbush Blueberry
121.	*Vaccinium corymbosum*	Highbush Blueberry
122.	*Verbascum thapsus*	Great Mullein
123.	*Verbena hastata*	Blue Vervain
124.	*Viburnum prunifolium*	Black Haw
125.	*Vitis* (various sp.)	Wild Grape
126.	*Vitis rupestris*	Wild Grape
127.	*Vitis vulpina*	Wild Grape
128.	*Xanthoxylum americanum*	Prickly Ash
129.	*Zea Mays*	Corn
130.	*Zea Mays identata*	Dent Corn
131.	*Zea Mays indurata*	Flint Corn
132.	*Zea Mays amylacea*	Flour Corn
133.	*Zea Mays saccharata*	Sweetcorn
134.	*Zea Mays everta*	Popcorn

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OKLAHOMA DELAWARE—Concluded

Native Use	Part of Plant Used	Type of Medicine
Medicine (tonic) ceremonial paint	Root	Simple and compound
Medicine (tonic)	Bark	Compound
Medicine (laxative)	Top	Simple
Medicine (tonic)	Root	Compound
Medicine (venereal disease, scrofula)	Root	Compound and simple
Medicine (fever, also in salve)	Root	Compound
Medicine (venereal disease)	Root	Compound
Medicine (diarrhea, fever)	Leaves (tea or chewed)	Simple
Medicine (whooping cough, fits, poultice)	Root, Leaves	Simple
Medicine (venereal disease)	Root	Compound
Medicine (tonic, laxative, food)	Root, Plant	Compound and simple
Medicine (herbal steam)	Twigs	Simple
Medicine (gravel in kidneys)	Root	Simple
Medicine (coughs, colds)	Bark	Simple
Food	Berries	
Food	Berries	
Medicine (rheumatism, colds)	Leaves	
Medicine (chills)	Root	Compound
Medicine (female generative organs)	Root	Compound
Food	Fruit	
Medicine (increase fertility)	Vine	Compound
Medicine (leucorrhea)	Juice from vine	Simple
Medicine (tonic, heart)	Bark	Simple and compound
Food		
Food		
Food		
Food		
Food		
Food		

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PLANTS AND PLANT USES OF THE DELAWARE

Botanical Name	Common Name
1. *Acorus calamus*	Sweet Flag
2. *Arctium minus*	Burdock
3. *Celastrus scandens*	Climbing Bittersweet
4. *Eupatorium perfoliatum*	Boneset
5. *Carya alba*	Hickory
6. *Inula helenium*	Elecampane
7. *Juniperus communis*	Juniper
8. *Nepeta cataria*	Catnip
9. *Ostrya virginiana*	Hop Hornbeam
10. *Pinus strobus*	White Pine
11. *Plantago major*	Plantain
12. *Populus tremuloides*	Aspen
13. *Prunus serotina*	Wild Cherry
14. *Quercus alba*	White Oak
15. *Quercus muhlenbergii*	Yellow Oak
16. *Rhus typhina*	Staghorn Sumac
17. *Roripa amoracia*	Horseradish
18. *Sanguinaria canadensis*	Bloodroot
19. *Tanacetum vulgare*	Tansy
20. *Verbascum thapsus*	Great Mullein
21. *Virburnum lentago*	Nanny-berry

MUNSEE, SIX NATIONS RESERVE, ONTARIO

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824

Native Use	Part of Plant Used	Type of Medicine
Medicine (colds)	Root scraped	
Medicine (blood purifier, poultice)	Root, Leaves	
Medicine (consumption)	Root	
Medicine (stomach)	Leaves	
Medicine (tonic, general debility, female disorder)	Bark	Compound
Medicine (colds)	Bark	Compound
Medicine (tonic, female weakness)	Bark	Compound
Medicine (infants)	Leaves	Simple
Medicine (tonic, general debility, female weakness)	Root	Compound
Medicine (kidneys, pulmonary boils)	Twigs, pitch	Simple
Medicine (bruises)	Leaves as poultice	Simple
Medicine (colds)	Bark	Compound
Medicine (tonic)	Bark	Compound
Medicine (tonic)	Bark	Compound
Medicine (to stop vomiting)	Bark, pour water in	Simple
Medicine (diarrhea)	Berries	
Medicine (neuralgia)	Leaves	
Medicine (to stop vomiting)	Root powdered	Compound and simple
Medicine (stomach)	Plant	
Medicine (pain, swelling)	Leaves as poultice	Simple
Medicine (measles)	Leaves	Simple

6:Harrington E-5 (1907-1910)1921
NM7 Delaware NM7
Lenape

PLANT SPIRITS

When gathering herbs for medicine it was customary to offer prayers to certain spirits. Some seem to have prayed at this time to the four directions, others to the presiding genius of the species of plants they sought, or to the spirit of the individual plant itself. The Minsi say that only certain plants were thus addressed. The Corn Spirit has already been mentioned. 278 776 782 824

LOCAL GENII

Certain localities, it is said, were thought to be the dwellings of local genii, to whom offerings were occasionally made, especially such places as displayed curious or unusual natural features, while even certain stones were said to have an animate principle or indwelling spirit. 776 823

Small buttons and
531 brooches ranging from ½ to ¾ of an inch
[291] in diameter were used in decorating the capes on women's over-waists. These capes were made to fall over the shoulders covering the upper arm. The silver buttons and brooches were arranged in various patterns sometimes covering the entire cape or collar. Several very old specimens are now extant in private and museum collections.

531 The use of Peyote[1] for ceremonial and
795 medicinal purposes was introduced among
● [278 the Delawares about 1880. With the
177] growth of this religious creed a new

[P.26, A]

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795

sybmolism in art motifs has developed among its followers. Ceremonial wands, prayer staffs and feather fans as well as headbands, arm bands, belts and garters bear geometric figures done in beads (woven or sewed on) symbolizing the Peyote or cactus "button," mind, sky, water, fire and sun's rays. (Typical Peyote designs in plate 1.)

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(1) A small species of cactus (**Lophophora Williamsii**) used for ceremonial and religious purposes by certain groups in all tribes between the Rocky Mountains and the Gulf of Mexico, from the Arkansas River southward almost to the City of Mexico. (Bureau of American Ethnology, Bull. 30, **Handbook of American Indians**, Washington, 1910.)

[P. 26, B]